

**Work Order ID 148845**

Monday, July 11, 2016 2:31:25 PM

**\*148845\***

Page 1

Item ID: D2230-3

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Mounting Lug

Start Date: 7/11/2016 Start Qty: 80.00

**\*80\***

Cust Item ID:

Required Date: 7/18/2016 Req'd Qty: 80.00

**\*80\***

Customer:

Reference:

Approvals:

Process Plan:

DAS  
21  
9-89

Date: JUL 11 2016

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D2230

Rev G

110

Outsource process - Machining

0.00

**\*110\***

HAAS CNC VERTICAL MACHINING #1

Outsource5

Memo

4,479.82

Outsource process - Machining

Issue P/O to Metec : 33008  
Machine as per dwg  
C of C is required

80

JUL 13 2016

DAS  
13  
9-89

120

Receive &amp; Inspect for Damage &amp; Mat'l Certs

0.00

**\*120\***

Packaging

Memo

0.27

Packaging

Ensure C of C is attach

80x 5016-9-13

130

QC6- Inspect dimensions to drawing

0.00

**\*130\***

QC

Memo

0.27

Quality Control

80

DAS  
38  
9-89

SEP 19 2016

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |                                                                                                       |  |
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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |  |  |  |                                                                                                       |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Step #:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  | MRB (QSI042) Approval<br><br><div style="border: 1px solid black; height: 100px; width: 100%;"></div> |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |                                                                                                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  | Completed By                                                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  | Lead hand / Supervisor Approval Verification                                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  | QC / QA Coordinator Approval                                                                          |  |
| <b>Root Cause</b><br><div style="display: flex; justify-content: space-between;"> <div>           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div>           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> |  | <b>FAULT CATEGORY</b><br><div style="display: flex; justify-content: space-between;"> <div>           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div>           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> <div>           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Misabeled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div>           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |                                                                                                       |  |
| OTHER : <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |                                                                                                       |  |

**Work Order ID 148845**

Monday, July 11, 2016 2:31:25 PM

**\*148845\***

Page 2

Item ID: D2230-3

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Mounting Lug

Start Date: 7/11/2016 Start Qty: 80.00

**\*80\***

Cust Item ID:

Required Date: 7/18/2016 Req'd Qty: 80.00

**\*80\***

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

140

**\*140\***

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

Memo

0.00

DAS

38

9-89

150

**\*150\***

QC

Quality Control

QC7-Inspect Chemical Conversion Coat

Memo

0.00

DAS

38

9-89

160

**\*160\***

Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

Memo

0.00

DAS

38

9-89

START TIME: \_\_\_\_\_

OVEN TEMPERATURE: \_\_\_\_\_

FINISH TIME: \_\_\_\_\_



DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                                                            |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div> |  |  |                                                                                                                                                            |  |  |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Step #: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | QTY Effective : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  | <b>MRB (QSI042) Approval</b><br><br>Completed By _____<br><br>Lead hand / Supervisor Approval Verification _____<br><br>QC / QA Coordinator Approval _____ |  |  |
| <b>Description Work Order Deviation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | <b>Disposition</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |                                                                                                                                                            |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                                                            |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                                                            |  |  |
| <b>Root Cause</b><br><div style="display: flex; justify-content: space-between;"> <div>             Environment <input type="checkbox"/><br/>             Design <input type="checkbox"/><br/>             Doc/Data <input type="checkbox"/><br/>             Equip/Tooling <input type="checkbox"/><br/>             Handling/Pre <input type="checkbox"/><br/>             Material <input type="checkbox"/><br/>             Internal Transport <input type="checkbox"/><br/>             Tribal Knowledge <input type="checkbox"/><br/>             LOA <input type="checkbox"/><br/>             Substation <input type="checkbox"/><br/>             Past Expiry Date <input type="checkbox"/><br/>             Misidentified <input type="checkbox"/> </div> <div>             No Re-verification <input type="checkbox"/><br/>             Operator <input type="checkbox"/><br/>             Offset/Setup <input type="checkbox"/><br/>             Supplier <input type="checkbox"/><br/>             Training <input type="checkbox"/><br/>             Use for Testing <input type="checkbox"/><br/>             Poor Information <input type="checkbox"/><br/>             Rushing <input type="checkbox"/><br/>             Product Improvement <input type="checkbox"/><br/>             Process Improvement <input type="checkbox"/><br/>             Manufacturing Process <input type="checkbox"/><br/>             Past Due <input type="checkbox"/> </div> </div> |  | <b>FAULT CATEGORY</b><br><div style="display: flex; justify-content: space-between;"> <div>             Pressure/Forced <input type="checkbox"/><br/>             Bending <input type="checkbox"/><br/>             Centre Not Concentric <input type="checkbox"/><br/>             Cracks <input type="checkbox"/><br/>             Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>             Cuffs <input type="checkbox"/><br/>             Crushing <input type="checkbox"/><br/>             Heat Treat <input type="checkbox"/><br/>             Wave/Twist in Tube <input type="checkbox"/><br/>             Marks/Chatter <input type="checkbox"/> </div> <div>             Temperature/Cure <input type="checkbox"/><br/>             Set-up <input type="checkbox"/><br/>             BOM/Route <input type="checkbox"/><br/>             Broken/Damage/Defect <input type="checkbox"/><br/>             Inspection Incomplete/Unqualified <input type="checkbox"/><br/>             Contamination <input type="checkbox"/><br/>             Countersink <input type="checkbox"/><br/>             Cut Too Short <input type="checkbox"/><br/>             Instructions Incomplete/Unclear <input type="checkbox"/><br/>             Drill Holes <input type="checkbox"/> </div> <div>             Power Loss/Surge <input type="checkbox"/><br/>             Folio/Program <input type="checkbox"/><br/>             Grain <input type="checkbox"/><br/>             Weld <input type="checkbox"/><br/>             Wrong Stock Pulled <input type="checkbox"/><br/>             Out of Sequence <input type="checkbox"/><br/>             Off-set <input type="checkbox"/><br/>             Misabeled <input type="checkbox"/><br/>             Fit/Function <input type="checkbox"/><br/>             Misaligned/off center <input type="checkbox"/> </div> <div>             Positioned Wrong <input type="checkbox"/><br/>             Outside Dimensions <input type="checkbox"/><br/>             Over/Under tolerance <input type="checkbox"/><br/>             Part Incorrect <input type="checkbox"/><br/>             Part Lost/Missing <input type="checkbox"/><br/>             Part Moved <input type="checkbox"/><br/>             Drawing <input type="checkbox"/><br/>             Finish <input type="checkbox"/><br/>             Misread <input type="checkbox"/><br/>             Turning Sequence <input type="checkbox"/> </div> </div> |  | OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                                                                                                                                            |  |  |

**Work Order ID 148845**

Monday, July 11, 2016 2:31:25 PM

**\*148845\***

Page 3

Item ID: D2230-3

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Mounting Lug

Start Date: 7/11/2016 Start Qty: 80.00

**\*80\***

Cust Item ID:

Required Date: 7/18/2016 Req'd Qty: 80.00

**\*80\***

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

170

QC3- Inspect Part Finish

0.00

**\*170\***

QC

Memo

0.13

Quality Control

SEP 19 2016

180

Identify as per dwg & Stock Location: S521

0.00

**\*180\***

Packaging

Memo

0.13

Packaging

SEP 19 2016

190

QC21- Final Inspection - Work Order Release

0.00

**\*190\***

QC

Memo

1.33

Quality Control

DAS  
21  
9-89

SEP 19 2016

DAS  
21  
9-89SEP 19 2016  
SEP 19 2016

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                             |                                                                                                                                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                           |                                 |                                   |                                                                                                                    |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |
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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                                             | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |                                           | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                                           |                                 |                                   |                                                                                                                    |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |
| Date :                                                       |                                             | Step #:                                                                                                                                                                            |                                           | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                           |                                 |                                   | MRB (QSI042) Approval                                                                                              |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |
| Description Work Order Deviation                             |                                             |                                                                                                                                                                                    |                                           | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                           |                                 |                                   | Completed By<br><br><br>Lead hand / Supervisor<br>Approval Verification<br><br><br>QC / QA Coordinator<br>Approval |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |
|                                                              |                                             |                                                                                                                                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                           |                                 |                                   |                                                                                                                    |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |
|                                                              |                                             |                                                                                                                                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                           |                                 |                                   |                                                                                                                    |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |
| Root Cause                                                   |                                             | FAULT CATEGORY                                                                                                                                                                     |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                           |                                 |                                   |                                                                                                                    |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |
| Environment <input type="checkbox"/>                         | No Re-verification <input type="checkbox"/> | Pressure/Forced <input type="checkbox"/>                                                                                                                                           | Temperature/Cure <input type="checkbox"/> | Power Loss/Surge <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Positioned Wrong <input type="checkbox"/> | Design <input type="checkbox"/> | Operator <input type="checkbox"/> | Bending <input type="checkbox"/>                                                                                   | Set-up <input type="checkbox"/> | Folio/Program <input type="checkbox"/> | Outside Dimensions <input type="checkbox"/> | Doc/Data <input type="checkbox"/> | Offset/Setup <input type="checkbox"/> | Centre Not Concentric <input type="checkbox"/> | BOM/Route <input type="checkbox"/> | Grain <input type="checkbox"/> | Over/Under tolerance <input type="checkbox"/> | Equip/Tooling <input type="checkbox"/> | Supplier <input type="checkbox"/> | Cracks <input type="checkbox"/> | Broken/Damage/Defect <input type="checkbox"/> | Weld <input type="checkbox"/> | Part Incorrect <input type="checkbox"/> | Handling/Pre <input type="checkbox"/> | Training <input type="checkbox"/> | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/> | Part Lost/Missing <input type="checkbox"/> | Material <input type="checkbox"/> | Use for Testing <input type="checkbox"/> | Cuffs <input type="checkbox"/> | Contamination <input type="checkbox"/> | Out of Sequence <input type="checkbox"/> | Part Moved <input type="checkbox"/> | Internal Transport <input type="checkbox"/> | Poor Information <input type="checkbox"/> | Crushing <input type="checkbox"/> | Countersink <input type="checkbox"/> | Off-set <input type="checkbox"/> | Drawing <input type="checkbox"/> | Tribal Knowledge <input type="checkbox"/> | Rushing <input type="checkbox"/> | Heat Treat <input type="checkbox"/> | Cut Too Short <input type="checkbox"/> | Mislabeled <input type="checkbox"/> | Finish <input type="checkbox"/> | LOA <input type="checkbox"/> | Product Improvement <input type="checkbox"/> | Wave/Twist in Tube <input type="checkbox"/> | Instructions Incomplete/Unclear <input type="checkbox"/> | Fit/Function <input type="checkbox"/> | Misread <input type="checkbox"/> | Substation <input type="checkbox"/> | Process Improvement <input type="checkbox"/> | Marks/Chatter <input type="checkbox"/> | Drill Holes <input type="checkbox"/> | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/> | Past Expiry Date <input type="checkbox"/> | Manufacturing Process <input type="checkbox"/> | OTHER : _____ |  |
| Misidentified <input type="checkbox"/>                       | Past Due <input type="checkbox"/>           |                                                                                                                                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                           |                                 |                                   |                                                                                                                    |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |



# Picklist Print

Monday, July 11, 2016 2:31:29 PM

Page 1

Work Order ID: 148845

**\*148845\***

Parent Item: D2230-3

**\*D2230-3\***

Parent Item Name: Mounting Lug

Start Date: 7/11/2016

Required Date: 7/18/2016

Start Qty: 80.00

Required Qty: 80.00

Comments: IPP D00.05.18 Added inspection level 8, and removed P/O for powder coat EC  
25 JLM VERIFIED BY: EC  
IPP REV :E NEW FOLIO # 10-05-

| Component Item ID/<br>Item Name          | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status            |
|------------------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|-------------------|
| D2230-3P<br><b>*D2230-3P*</b><br>Lug     |                        | Purchased     | No          |                     |                  |                 | Each               | 0.0000         |             | 80           |               |                |                   |
|                                          |                        |               |             |                     |                  |                 |                    |                | **          | 80x          |               |                |                   |
| D2423<br><b>*D2423*</b><br>Lug Extrusion |                        | Manufactured  | No          |                     |                  |                 | f                  | 210.2360       |             | 5.751579     |               |                |                   |
|                                          |                        |               |             |                     |                  |                 |                    |                | **          |              |               | JUL 13 2016    | DAS<br>13<br>9-89 |

Location

Metec

127892

131451

Loc Qty

210.2359767

38.9964647

171.239512

Loc Code

B148835

SEP 19 2016

DAS  
13  
9-89

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



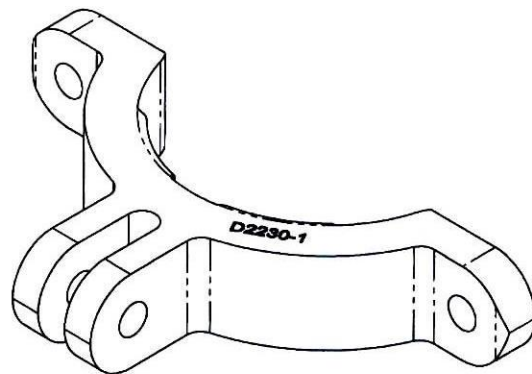
## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

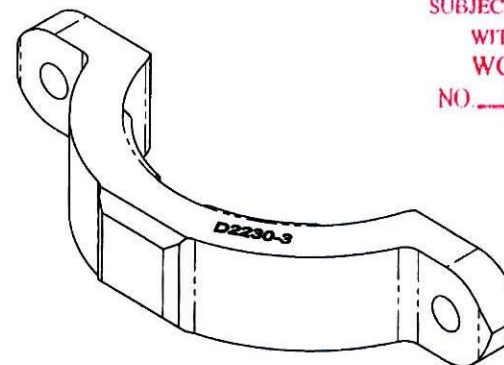
Work Order update only ☐

|                                                              |                          |                                                                                                                                                                                    |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                               |  |                                                                                                                                                     |  |
|--------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                          | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |                                                 | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                                                |                                               |  |                                                                                                                                                     |  |
| Date :                                                       |                          | Step #:                                                                                                                                                                            |                                                 | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                               |  | MRB (QSI042) Approval<br><br><br>Completed By<br><br><br>Lead hand / Supervisor<br>Approval Verification<br><br><br>QC / QA Coordinator<br>Approval |  |
| Description Work Order Deviation                             |                          |                                                                                                                                                                                    |                                                 | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                |                                               |  |                                                                                                                                                     |  |
|                                                              |                          |                                                                                                                                                                                    |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                               |  |                                                                                                                                                     |  |
|                                                              |                          |                                                                                                                                                                                    |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                               |  |                                                                                                                                                     |  |
| Root Cause                                                   |                          | FAULT CATEGORY                                                                                                                                                                     |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                               |  |                                                                                                                                                     |  |
| Environment <input type="checkbox"/>                         | <input type="checkbox"/> | No Re-verification <input type="checkbox"/>                                                                                                                                        | Pressure/Forced <input type="checkbox"/>        | Temperature/Cure <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Power Loss/Surge <input type="checkbox"/>      | Positioned Wrong <input type="checkbox"/>     |  |                                                                                                                                                     |  |
| Design <input type="checkbox"/>                              | <input type="checkbox"/> | Operator <input type="checkbox"/>                                                                                                                                                  | Bending <input type="checkbox"/>                | Set-up <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Folio/Program <input type="checkbox"/>         | Outside Dimensions <input type="checkbox"/>   |  |                                                                                                                                                     |  |
| Doc/Data <input type="checkbox"/>                            | <input type="checkbox"/> | Offset/Setup <input type="checkbox"/>                                                                                                                                              | Centre Not Concentric <input type="checkbox"/>  | BOM/Route <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Grain <input type="checkbox"/>                 | Over/Under tolerance <input type="checkbox"/> |  |                                                                                                                                                     |  |
| Equip/Tooling <input type="checkbox"/>                       | <input type="checkbox"/> | Supplier <input type="checkbox"/>                                                                                                                                                  | Cracks <input type="checkbox"/>                 | Broken/Damage/Defect <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Weld <input type="checkbox"/>                  | Part Incorrect <input type="checkbox"/>       |  |                                                                                                                                                     |  |
| Handling/Pre <input type="checkbox"/>                        | <input type="checkbox"/> | Training <input type="checkbox"/>                                                                                                                                                  | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Inspection Incomplete/Unqualified <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Wrong Stock Pulled <input type="checkbox"/>    | Part Lost/Missing <input type="checkbox"/>    |  |                                                                                                                                                     |  |
| Material <input type="checkbox"/>                            | <input type="checkbox"/> | Use for Testing <input type="checkbox"/>                                                                                                                                           | Cuffs <input type="checkbox"/>                  | Contamination <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Out of Sequence <input type="checkbox"/>       | Part Moved <input type="checkbox"/>           |  |                                                                                                                                                     |  |
| Internal Transport <input type="checkbox"/>                  | <input type="checkbox"/> | Poor Information <input type="checkbox"/>                                                                                                                                          | Crushing <input type="checkbox"/>               | Countersink <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Off-set <input type="checkbox"/>               | Drawing <input type="checkbox"/>              |  |                                                                                                                                                     |  |
| Tribal Knowledge <input type="checkbox"/>                    | <input type="checkbox"/> | Rushing <input type="checkbox"/>                                                                                                                                                   | Heat Treat <input type="checkbox"/>             | Cut Too Short <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mislabeled <input type="checkbox"/>            | Finish <input type="checkbox"/>               |  |                                                                                                                                                     |  |
| LOA <input type="checkbox"/>                                 | <input type="checkbox"/> | Product Improvement <input type="checkbox"/>                                                                                                                                       | Wave/Twist in Tube <input type="checkbox"/>     | Instructions Incomplete/Unclear <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Fit/Function <input type="checkbox"/>          | Misread <input type="checkbox"/>              |  |                                                                                                                                                     |  |
| Substation <input type="checkbox"/>                          | <input type="checkbox"/> | Process Improvement <input type="checkbox"/>                                                                                                                                       | Marks/Chatter <input type="checkbox"/>          | Drill Holes <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/>     |  |                                                                                                                                                     |  |
| Past Expiry Date <input type="checkbox"/>                    | <input type="checkbox"/> | Manufacturing Process <input type="checkbox"/>                                                                                                                                     |                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                               |  |                                                                                                                                                     |  |
| Misidentified <input type="checkbox"/>                       | <input type="checkbox"/> | Past Due <input type="checkbox"/>                                                                                                                                                  | OTHER :                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                               |  |                                                                                                                                                     |  |





**D2230-1 MOUNTING LUG**



**D2230-3 MOUNTING LUG**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 148845 MJS

16-07-11

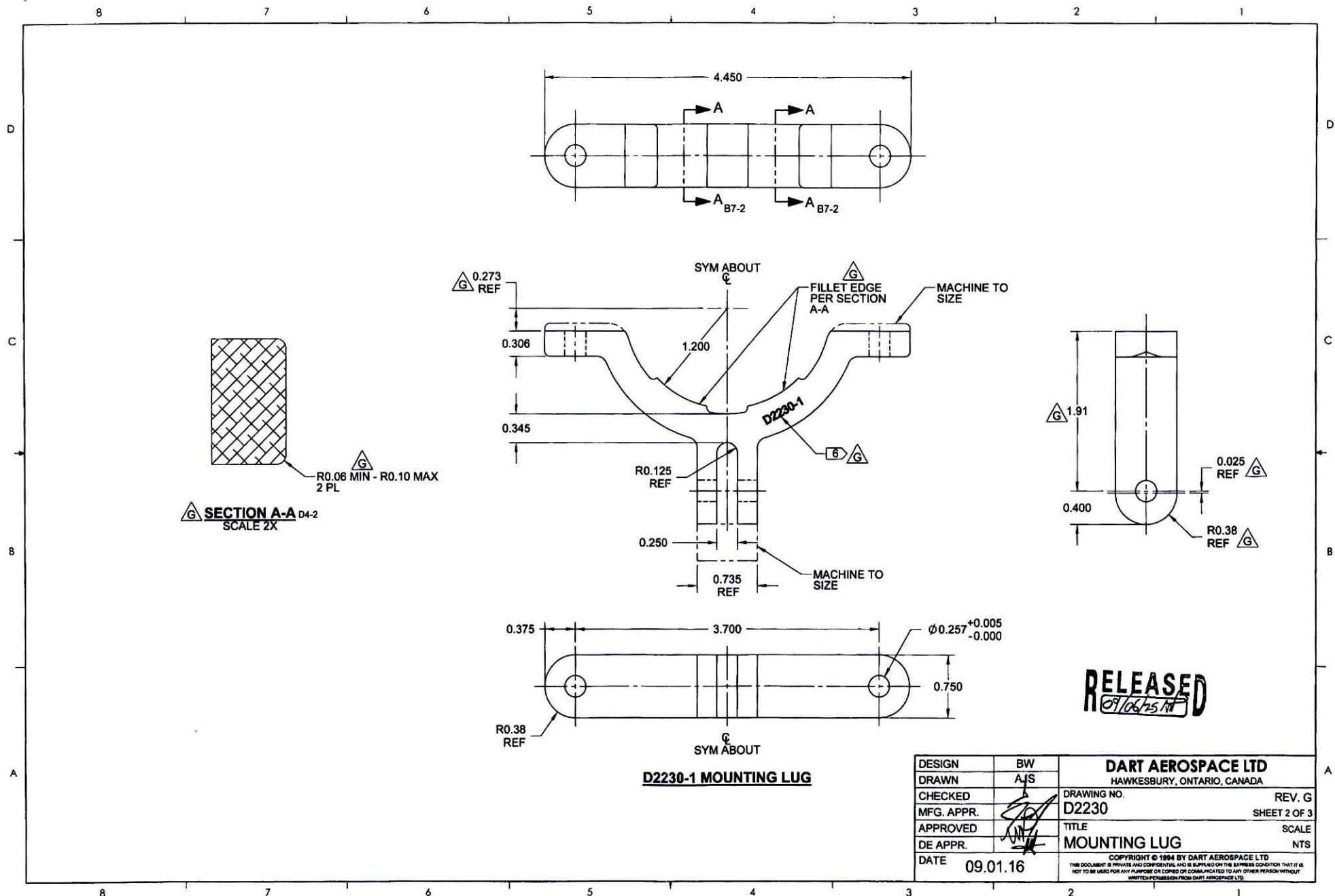
**RELEASED**  
09/01/16

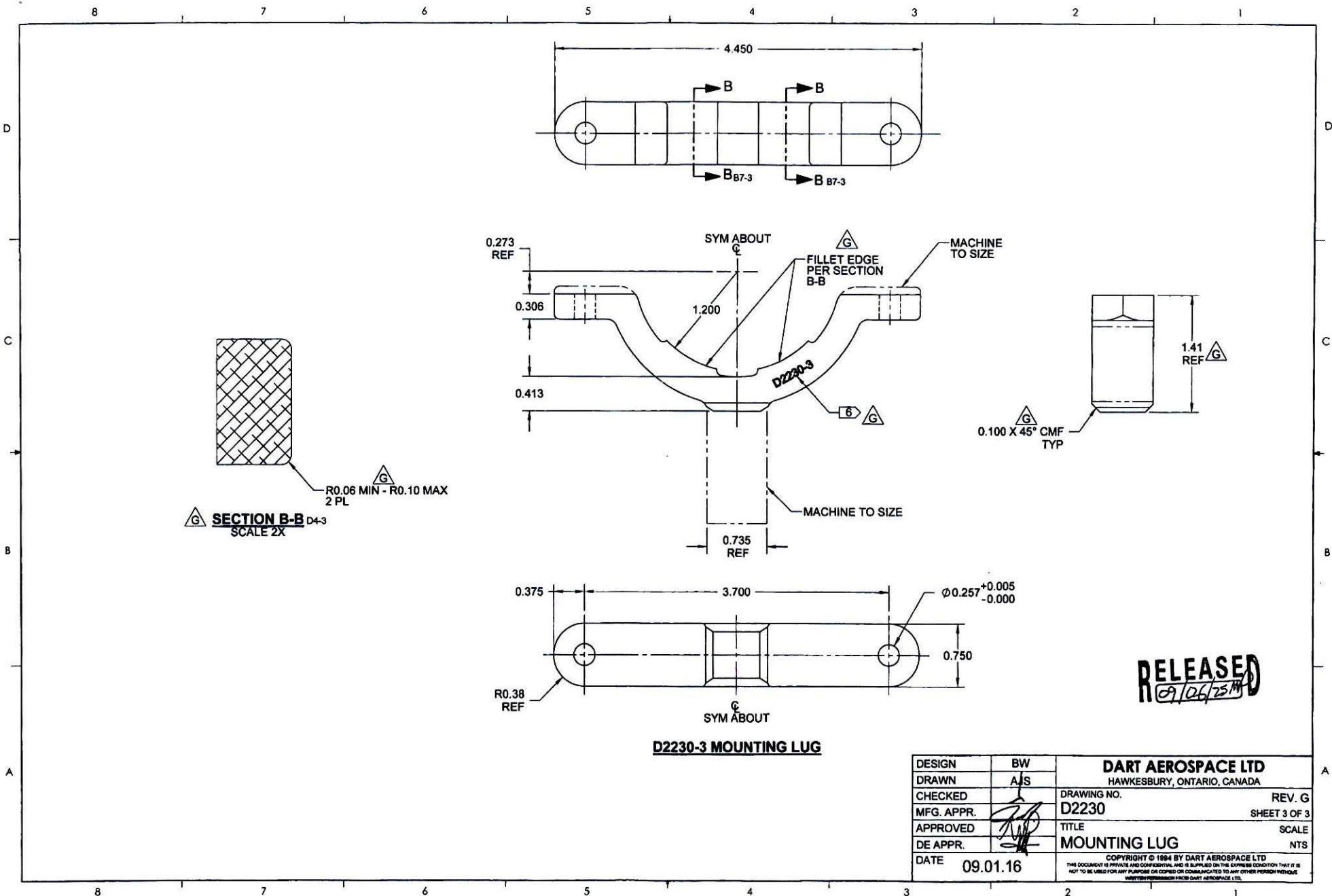
| G          | REDRAWN IN SOLIDWORKS TO CURRENT DESIGN STANDARDS. REFER TO SECTION A-A & B-B FILLET ADDED TO PREVENT CHAFING OF RUBBER CUSHION ON INSTALLATION. | AJS                                                                                                                                                                                                                                                                        | 09.01.16     |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| F          | REDESIGN; R1.200 WAS 1.100                                                                                                                       | CP                                                                                                                                                                                                                                                                         | 99.12.13     |
| E          | RE-DESIGN                                                                                                                                        | BW                                                                                                                                                                                                                                                                         | 95.01.04     |
| D          | RE-DESIGN                                                                                                                                        | BW                                                                                                                                                                                                                                                                         | 95.01.04     |
| C          | RE-DESIGN                                                                                                                                        | BW                                                                                                                                                                                                                                                                         | 94.03.30     |
| REV.       | DESCRIPTION                                                                                                                                      | BY                                                                                                                                                                                                                                                                         | DATE         |
| DESIGN     | BW                                                                                                                                               | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                   |              |
| DRAWN      | AJS                                                                                                                                              |                                                                                                                                                                                                                                                                            |              |
| CHECKED    |                                                                                                                                                  | DRAWING NO.                                                                                                                                                                                                                                                                | REV. G       |
| MFG. APPR. |                                                                                                                                                  | D2230                                                                                                                                                                                                                                                                      | SHEET 1 OF 3 |
| APPROVED   |                                                                                                                                                  | TITLE                                                                                                                                                                                                                                                                      | SCALE        |
| DE APPR.   |                                                                                                                                                  | MOUNTING LUG                                                                                                                                                                                                                                                               | NTS          |
| DATE       | 09.01.16                                                                                                                                         | COPYRIGHT © 1994 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMBINED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |              |



**NOTES:**

- 1) MATERIAL: MAKE FROM D2423 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE PART NUMBER TO A DEPTH OF 0.010 ± 0.005 IN THIS LOCATION, WITH TOOL TIP RADIUS OF 0.015 ± 0.005.
- 7) WEIGHT: -1: 0.16 lbs  
-3: 0.14 lbs





# **D2230-3 MOUNTING LUG**

|            |          |                                                                                                                                                                                                                                                               |              |
|------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | BW       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                      |              |
| DRAWN      | AJS      |                                                                                                                                                                                                                                                               |              |
| CHECKED    |          | DRAWING NO.                                                                                                                                                                                                                                                   | REV. G       |
| MFG. APPR. |          | D2230                                                                                                                                                                                                                                                         | SHEET 3 OF 3 |
| APPROVED   |          | TITLE                                                                                                                                                                                                                                                         | SCALE        |
| DE APPR.   |          | MOUNTING LUG                                                                                                                                                                                                                                                  | NTS          |
| DATE       | 09.01.16 | COPYRIGHT © 1984 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD. |              |

**RELEASED**  
09/06/25 M





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

# PURCHASE ORDER

Purchase Order ID PO33008

Purchase Order Date 7/13/2016

PO Print Date 7/13/2016

Page Number 1 of 2

Order From :

VC-MET003

METEC METAL TECHNOLOGY INC.  
20 TERRY FOX DRIVE PO BOX 781  
VANKLEEK HILL, ON K0B 1R0  
CA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

E-MAILED

JUL 13 2016

Contact Name

Vendor Phone 613 678 3957

Ship To Contact

Ship To Phone

Ship Via: Dart Truck

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 10

CAD

Destination-Collect

| Line Nbr    | Reference<br>Vendor Part Number<br>Line Comments<br>Delivery Comments              | Description/<br>Mfg ID | Req Date/<br>Taxable<br>Promise Date | CD | Req Qty/<br>Unit of<br>Measure | PO Unit Price | Extended<br>Price |
|-------------|------------------------------------------------------------------------------------|------------------------|--------------------------------------|----|--------------------------------|---------------|-------------------|
| 1           | D2230-1P<br>AS PER DWG D2230 REV. G<br>B148844<br>ALODINE AND PAINT AS PER QSI 005 | Lug                    | 7/19/2016<br>Yes<br>7/19/2016        |    | 50.00<br>Each                  | \$16.10       | \$805.00          |
| Line Total: |                                                                                    |                        |                                      |    |                                |               | \$805.00          |
| 2           | D2230-3P<br>AS PER DWG D2230 REV. G<br>B148845<br>ALODINE AND PAINT AS PER QSI 005 | Lug                    | 7/19/2016<br>Yes<br>7/19/2016        | FN | 80.00<br>Each                  | \$13.80       | \$1,104.00        |
| Line Total: |                                                                                    |                        |                                      |    |                                |               | \$1,104.00        |

Note:

7/13/2016



20 Terry Fox Drive  
Vankleek Hill, Ontario K0B 1R0 , Canada  
Tel: (613) 678-3957  
Fax: (613) 678-3956

**Delivery Slip No.:** 21381  
**Date:** Sep 12, 2016  
**Page:** 1

|                                                                                                                                |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Sold to:</b><br><br><b>Dart Aerospace Ltd.</b><br>Att. Linda Lacelle<br>1270 Aberdeen Street<br>Hawkesbury, Ontario K6A 1K7 | <b>Ship to:</b><br><br>Dart Aerospace Ltd.<br>Att. Linda Lacelle<br>1270 Aberdeen Street<br>Hawkesbury, Ontario K6A 1K7 |
| <b>Order No.:</b> 33008                                                                                                        | <b>Sold By:</b> VanDenYssel, David                                                                                      |
| <b>Shipped By:</b> your truck                                                                                                  | <b>Ship Date:</b> Sep 12, 2016                                                                                          |

| Description                                                                                                                                                                                            | Unit | Ordered quantity | Shipped quantity | Backorder quantity |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|------------------|--------------------|
| D2230-1 Mounting Lug, as per drawing D2230 Rev.G<br>Alodine and Paint as per QSI 005                                                                                                                   | Each | 50               |                  |                    |
| D2230-3 Mounting Lug, as per drawing D2230 Rev.G<br>Alodine and Paint as per QSI 005                                                                                                                   | Each | 80               | 80               |                    |
| The delivered goods must be inspected upon receipt to confirm compliance.<br>Should there be discrepancies please notify METEC within 30 days of delivery.<br>The goods are otherwise deemed accepted. |      |                  |                  |                    |

Received by

Splb-9-13

**Thank you for your order!**



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 [metec@metec.ca](mailto:metec@metec.ca)

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## CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, Ont.  
K6A 1K7

SHIPPED TO:

same

| <u>QUANTITY</u> | <u>PART NUMBER</u> | <u>PART NAME</u> | <u>P.O. NUMBER</u> |
|-----------------|--------------------|------------------|--------------------|
| 80              | D2230.3            | Lug Paint 20533  | 33008              |

MATERIAL: supplied by DART B14835

We hereby certify that the above parts were made in conformance with applicable drawings.

*METEC Metal Technology Inc.*

A handwritten signature in blue ink, appearing to read "Jan Norris".

Jan Norris

Vankleek Hill, September 12, 2016